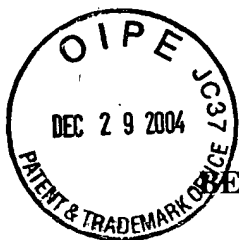


AF / JZW



**PATENT APPLICATION**

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES**

In re application of

Docket No: A8268

Olaf STORAASLI

Appln. No.: 10/020,173

Group Art Unit: 2862

Confirmation No.: 9311

Examiner: Patidar, Jay M.

Filed: December 18, 2001

For: FIBER OPTIC CENTRAL TUBE CABLE WITH STRANDED TUBES AROUND A  
BUNDLE SUPPORT MEMBER

**SUBMISSION OF APPEAL BRIEF**

**MAIL STOP APPEAL BRIEF - PATENTS**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

Submitted herewith please find an Appeal Brief. A check for the statutory fee of \$500.00 is attached. The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account. A duplicate copy of this paper is attached.

Respectfully submitted,

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WASHINGTON OFFICE

**23373**

CUSTOMER NUMBER

Date: December 29, 2004



**PATENT APPLICATION**

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**APPEAL BRIEF UNDER 37 C.F.R. § 41.37**

**MAIL STOP APPEAL BRIEF - PATENTS**

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

Sir:

In accordance with the provisions of 37 C.F.R. § 41.37, Appellant submits the following:

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**I. REAL PARTY IN INTEREST**

The real part in interest is ALCATEL by virtue of an assignment executed by Olaf Stoorasli (hereinafter “Appellant”) on February 27, 2002 and recorded in the U.S. Patent and Trademark Office on March 22, 2002 at reel 012711, frame 0573.

## **II. RELATED APPEALS AND INTERFERENCES**

Upon information and belief, there are no other prior or pending appeals, interferences, or judicial proceedings known to Appellant, Appellant's Representative or the Assignee that may be related to, be directly affected by, or have a bearing on the Board's decision in this Appeal.

### **III. STATUS OF CLAIMS**

Claims 1-23 are pending and are the basis of this appeal (*see* Claims Appendix).

Claims 1-23 stand rejected.

#### **IV. STATUS OF AMENDMENTS**

This is an appeal of the Final Rejection dated April 8, 2004, in which claims 1-23 were rejected. In an After Final Amendment filed June 30, 2004, claims 1 and 14 were amended in view of an objection by the Examiner. The Advisory Action dated July 22, 2004 indicates that for purposes of Appeal the Amendment **will** be entered and the status of the claims will be: Claims rejected: 1-23. Therefore, the claims provided in the Claims Appendix include the amendments of June 30, 2004.

## **V. SUMMARY OF THE CLAIMED SUBJECT MATTER**

The present invention is a central tube cable. The features of independent claims 1, 14 and 23 are described herein.

**Claim 1-** Claim 1 recites a central tube cable. The cable 10 comprises a cable jacket 12 defining an optical fiber cavity 14 therein (Appellant's specification page 2, para. [09]; Fig. 1). At least one radial strength member 16 is embedded in the cable jacket 12 (Appellant's specification page 2, para. [09]; Fig. 1). The optical fiber cavity 14 contains a plurality of optical fibers 18 disposed therein, and a bundle support member 22 to limit axial movement of the optical fibers 18 with respect to the bundle support member 22 (Appellant's specification page 2, para. [09]; page 3, para. [13]; Fig. 1). At least one end of the bundle support member 22 is securable to a splice box 30 (Appellant's specification page 3, para. [13]; Fig. 3). The reference numeral for the splice box was added in the June 30, 2004 Amendment, which the Examiner indicated would be entered for purposes of Appeal. For Fig. 3, please see newly added Fig. 3 which was approved by the Examiner in the July 22, 2004 Advisory Action.

**Claim 14 -** Claim 14 recites a central tube cable. The cable 10 comprises a cable jacket 12 defining an optical fiber cavity 14 therein (Appellant's specification page 2, para. [09]; Fig. 1). The optical fiber cavity 14 contains a plurality of optical fibers 18 disposed therein, and a bundle support member 22 to limit axial movement of the optical fibers 18 with respect to the bundle support member 22 (Appellant's specification page 2, para. [09]; page 3, para. [13]; Fig. 1). The bundle support member 22 is recited as being string-like (Appellant's specification page

3, para. [11]). At least one end of the bundle support member 22 is securable to a splice box 30 (Appellant's specification page 3, para. [13]; Fig. 3). The reference numeral for the splice box was added in the June 30, 2004 Amendment, which the Examiner indicated would be entered for purposes of Appeal. For Fig. 3, please see newly added Fig. 3 which was approved by the Examiner in the July 22, 2004 Advisory Action.

**Claim 23** - Claim 23 recites a central tube cable. The cable 10 comprises a cable jacket 12 defining an optical fiber cavity 14 therein (Appellant's specification page 2, para. [09]; Fig. 1). At least one radial strength member 16 is embedded in the cable jacket 12 (Appellant's specification page 2, para. [09]; Fig. 1). The optical fiber cavity 14 contains a plurality of optical fibers 18 disposed therein (Appellant's specification page 2, para. [09]). There is further provided a means for securing the central tube cable 10 to a splice box 30 and for preventing axial movement of the optical fibers 18 (Appellant's specification page 2, para. [09]; page 3, para. [13]; Figs. 1 and 3). A non-limiting embodiment of the structure corresponding to the claimed "means" is the bundle support member 22. The reference numeral for the splice box was added in the June 30, 2004 Amendment, which the Examiner indicated would be entered for purposes of Appeal. For Fig. 3, please see newly added Fig. 3 which was approved by the Examiner in the July 22, 2004 Advisory Action.



**VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL**

**A.** Claims 1, 2, 3, 6-9 and 14-20 stand rejected under 35 U.S.C. § 102(b) as allegedly being anticipated by U.S. Patent No. 5,448,670 to Blew et al. (“Blew”).

**B.** Claims 1 and 14 stand rejected under 35 U.S.C. § 102(b) as allegedly being anticipated by JP 2-238412 to Misono et al. (“Misono”).

**C.** Claims 4, 5, 10-13, 21 and 22 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable in view of Blew, U.S. Patent No. 4,709,983 to Plessner et al. (“Plessner”) and U.S. Patent No. 5,390,273 to Rahman et al. (“Rahman US”).

**D.** Claims 1-13 and 23 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable in view of GB 2159291 to Heywood (“Heywood”) and Blew.

**E.** Claims 14-23 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over EP 0564130 to Rahman (“Rahman EP”) in view of Blew.

## VII. ARGUMENTS

### A. Rejection of claims 1, 2, 3, 6-9 and 14-20 under 35 U.S.C. § 102(b) in view of Blew.

It is respectfully submitted that claims 1, 2, 3, 6-9 and 14-20 are patentable over Blew for at least the following reasons.

#### 1. Claim 1

The Examiner maintains that Blew “inherently” discloses that the alleged bundle support member (i.e. central support member 36) is connected to a splice box in order to support the cable, i.e. between two poles. The Examiner further refers to the third paragraph, para. [03], on pg. 1 of the Appellant’s Application.

Appellant submits, however, that the above cited feature of claim 1 is not inherent. For example, evidence of inherency in a reference “must make it clear that the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill.” *Continental Can Co. USA Inc. v. Monsanto Co.*, 948 F.2d 1264, 1268, 20 U.S.P.Q.2d (BNA) 1746, 1749 (Fed. Cir. 1991) (emphasis added).

“Inherency, however may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient.” *Id.* at 1269. (citing *In re Oelrich*, 666 F.2d 578, 581, 212 U.S.P.Q. (BNA) 323, 326 (Fed. Cir. 1981) (quoting *Hansgirk v. Kemmer*, 102 F.2d 212, 214, 40 U.S.P.Q. (BNA) 665, 667 (C.C.P.A. 1939))) (emphasis in original); *see also Scaltech Inc. v. Retec/Tetra L.L.C.*, 178 F.3d 1378, 51

U.S.P.Q.2d 1055, 1059 (Fed. Cir. 1999); and *In re Robertson*, 169 F.3d 743, 745, 49 U.S.P.Q.2d 1949, 1950-51 (Fed. Cir. 1999).

As acknowledged by the Examiner, in paragraph [03] (Background Section) of the current Application, the Appellant discloses that central tube cables are typically installed between telephone polls, and the ends of the cables are connected to splice boxes. Since Blew discloses a central tube cable (i.e., Abstract), the Examiner appears to be citing to paragraph [03] of the Background Section of the current Application as evidence that it is *inherent* that the ends of central tube cables are connected to splice boxes.

Nevertheless, in regard to such “conventional” central tube cables of paragraph [03], the Appellant discloses that the cables are connected to the splice boxes by fixedly securing the radial strength members to the splice boxes. As stated in paragraph [04], since the buffer tubes and fibers of the conventional central cable tubes are not restrained against axial movement, the tubes and fibers may be pulled out of the splice box due to strain of the load. On the other hand, claim 1 recites that the bundle support member is securable to the splice box. Such configuration severely restricts axial movement of the buffer tubes, so that the buffer tubes and fibers will not be pulled away from the splice box (non-limiting embodiment of paragraph [13]).

In view of the teachings of Blew and paragraph [03] of the present Application, Appellant submits that one skilled in the art would be inclined to secure the fiber optic cable 20 of Blew to a splice box by use of the alleged radial strength members 34’ (as taught in para. [03] of the present Application), rather than a bundle support member (Fig. 6 of Blew). Therefore, a

teaching to secure the fiber optic cable 20 to a splice box by use of the alleged bundle support member, i.e., central support member 36, is not “necessarily present” in the Blew reference, as indicated above for evidence of inherency. Rather, it appears that the Examiner’s rejection is based on impermissible hindsight reasoning.

In the July 22, 2004 Advisory Action, the Examiner maintains that one of the reasons of having a tension member, i.e. a bundle support member, is to connect the tension member to a splice box to support a cable. The Examiner therefore maintains that the central support member 36 of Blew would be used to connect the cable to a splice box. However, for the reasons set forth above, Appellant submits that it is not inherent, nor obvious that the central support member 36 of Blew would be used to connect the cable to a splice box.

Also, as support for showing that a central support member is used to connect a cable to a splice box, the Examiner “notes” U.S. Patent No. 5,546,495 to Bruckner (“Bruckner”) in the Attachment to the Advisory Action. Such reference is not officially of record and was not previously relied upon in a prior art reference. Therefore, the citation in the Advisory Action is the first instance Appellant was apprised of such reference. Nevertheless, even if Bruckner is officially made of record, Appellant submits that the reference fails to cure the deficient teachings of Blew. For example, Bruckner discloses a cable strength member 18 which is secured to a splice box (Fig. 3; col. 4, lines 53-67). However, the cable strength member 18 does not disclose the claimed bundle support member. The cable strength member 18 is not provided inside the inner jacket 17 which contains the optical fibers 12 (Fig. 3; col. 3, lines 13-14). Rather, by virtue of the positioning of the cable strength member 18, the cable strength member

18 is more closely related to the claimed radial strength member than the claimed bundle support member. Accordingly, even if made of record, Appellant submits that Bruckner fails to cure the deficient teachings of Blew.

Further, in the Attachment to the Advisory Action, the Examiner maintains that the connection of the support member to the splice box is not a main inventive element of the present Application. Appellant respectfully disagrees with this assertion. For example, as disclosed in para. [12], an important concern of the present invention is that the buffer tubes not be pulled away from the splice box when the cable experiences strain. The Application further discloses that axial movement of the buffer tubes, with respect to the jacket, is severely restricted when the ends of the bundle support member are secured to the splice boxes, and as such, the buffer tubes and fibers will not be pulled away from the splice closure when the cable is subjected to high loads (para. [13]).

In view of the above, Appellant submits that claim 1 is not anticipated by the Blew reference.

## **2. Claims 2, 3 and 6-9**

Since claims 2, 3 and 6-9 are dependent upon claim 1, Appellant submits that such claims are allowable at least by virtue of their dependency.

**3. Claim 14**

Appellant submits that independent claim 14 is patentable for at least analogous reasons as set forth above for claim 1.

**4. Claims 15-20**

Since claims 15-20 are dependent upon claim 14, Appellant submits that such claims are patentable at least by virtue of their dependency.

**B. Rejection of claims 1 and 14 under 35 U.S.C. § 102(b) in view of Misono.**

It is respectfully submitted that claims 1 and 14 are patentable over Misono for at least the following reasons.

**1. Claim 1**

The Examiner maintains that Misono “inherently” discloses that the bundle support member is connected to a splice box in order to support the cable between two vertical poles. The Examiner again refers to the third paragraph, i.e. para. [03], on pg. 1 of the Application.

As stated above, evidence of inherency in a reference “must make it clear that the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill.” *Continental Can Co. USA Inc. v. Monsanto Co.*, 948 F.2d 1264, 1268, 20 U.S.P.Q.2d (BNA) 1746, 1749 (Fed. Cir. 1991) (emphasis added).

“Inherency, however may not be established by probabilities or possibilities. The mere fact that

a certain thing may result from a given set of circumstances is not sufficient.” *Id.* at 1269. (citing *In re Oelrich*, 666 F.2d 578, 581, 212 U.S.P.Q. (BNA) 323, 326 (Fed. Cir. 1981) (quoting *Hansgirk v. Kemmer*, 102 F.2d 212, 214, 40 U.S.P.Q. (BNA) 665, 667 (C.C.P.A. 1939))) (emphasis in original); *see also Scaltech Inc. v. Retec/Tetra L.L.C.*, 178 F.3d 1378, 51 U.S.P.Q.2d 1055, 1059 (Fed. Cir. 1999); and *In re Robertson*, 169 F.3d 743, 745, 49 U.S.P.Q.2d 1949, 1950-51 (Fed. Cir. 1999).

For similar reasons as set forth above in the rejection of claim 1 over the Blew reference, Appellant submits that, in view of para. [03] of the present Application, one skilled in the art would be inclined to secure the cable of Misono to a splice box by use of the alleged radial strength members 8 (Fig. 2 of Misono). A teaching to secure the cable of Misono to a splice box by use of the alleged bundle support member, i.e., tension member 1, is not “necessarily present” in the Misono reference. Rather, it appears that the Examiner’s rejection is based on impermissible hindsight reasoning.

In addition, Appellant submits that Bruckner, although not officially of record, nor relied upon in a previous prior art rejection, fails to cure the deficient teachings of Misono for similar reasons as set forth on pg. 10 of this Appeal Brief.

Accordingly, Appellant submits that claim 1 is patentable over the cited reference.

**2. Claim 14**

Appellant submits that independent claim 14 is patentable for at least analogous reasons as set forth above for claim 1.

**C. Rejection of claims 4, 5, 10-13, 21 and 22 under 35 U.S.C. § 103(a) in view of Blew, Plessner and Rahman US.**

Since claims 4, 5, 10-13, 21 and 22 are dependent upon one of claims 1 or 14, and Plessner and Rahman US fail to cure the deficient teachings of Blew, in regard to claims 1 and 14, Appellant submits that claims 4, 5, 10-13, 21 and 22 are patentable at least by virtue of their dependency.

**D. Rejection of claims 1-13 and 23 under 35 U.S.C. § 103(a) in view of Heywood and Blew.**

**1. Claim 1**

Heywood fails to cure the deficient teachings of Blew, as set forth above on pgs. 8-10 of this Appeal Brief. For example, Heywood fails to disclose that the central strength member 3 is securable to a splice box (Fig. 1). Accordingly, Appellant submits that claim 1 is patentable over the combination of the cited references.



**2. Claims 2-13**

Since claims 2-13 are dependent upon claim 1, Appellant submits that such claims are patentable over the cited references at least by virtue of their dependency.

**3. Claim 23**

Appellant submits that claim 23 is patentable over the combination of the cited references for at least analogous reasons as provided above for claim 1.

**E. Rejection of claims 14-23 under 35 U.S.C. § 103(a) in view of Rahman EP and Blew.**

**1. Claim 14**

Rahman EP fails to cure the deficient teachings of Blew, as set forth above on pgs. 8-10 of this Appeal Brief. For example, Rahman EP fails to disclose that the central structural member 2 is securable to a splice box (Fig. 4). Accordingly, Appellant submits that claim 14 is patentable over the combination of the cited references.

**2. Claims 15-22**

Since claims 15-22 are dependent upon claim 14, Appellant submits that such claims are patentable over the cited references at least by virtue of their dependency.

**3. Claim 23**

Appellant submits that claim 23 is patentable over the combination of the cited references for at least analogous reasons as provided above for claim 14.

Unless a check is submitted herewith for the fee required under 37 C.F.R. §41.37 and 1.17(c), please charge said fee to Deposit Account No. 19-4880.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

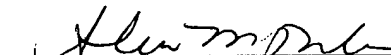
Respectfully submitted,

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WASHINGTON OFFICE

**23373**

CUSTOMER NUMBER

  
Allison M. Tulino  
Registration No. 48,294

Date: December 29, 2004

CLAIMS APPENDIX

CLAIMS 1-23 ON APPEAL:

1. (rejected) A central tube cable, comprising:  
a cable jacket defining an optical fiber cavity therein;  
at least one radial strength member embedded in said jacket;  
a plurality of optical fibers disposed within said optical fiber cavity; and  
a bundle support member disposed inside said optical fiber cavity to limit axial movement of said optical fibers with respect to said bundle support member,  
wherein at least one end of said bundle support member is securable to a splice box.
2. (rejected) The central tube cable of claim 1, wherein said optical fibers are helically wound around said bundle support member.
3. (rejected) The central tube cable of claim 1, where said optical fibers are S-Z stranded around said bundle support member.
4. (rejected) The central tube cable of claim 1, wherein said bundle support member is rigid.
5. (rejected) The central tube cable of claim 1, wherein said bundle support member is flexible.

6. (rejected) The central tube cable of claim 1, further comprising a plurality of buffer tubes in which said optical fibers are respectively housed.

7. (rejected) The central tube cable of claim 6, wherein at least some of said buffer tubes contact said bundle support member.

8. (rejected) The central tube cable of claim 7, wherein said buffer tubes are helically stranded around said bundle support member.

9. (rejected) The central tube cable of claim 7, wherein said buffer tubes are S-Z stranded around said bundle support member.

10. (rejected) The central tube cable of claim 1, wherein said optical fibers are held together as an optical fiber ribbon.

11. (rejected) The central tube cable of claim 10, wherein said optical fibers are held together as a plurality of optical fiber ribbons.

12. (rejected) The central tube cable of claim 11, wherein said optical fiber ribbons are helically stranded around said bundle support member.

13. (rejected) The central tube cable of claim 11, where said optical fiber ribbons are S-Z stranded around said bundle support member.

14. (rejected) A central tube cable, comprising:  
a cable jacket defining an optical fiber cavity therein;  
a plurality of optical fibers disposed within said optical fiber cavity; and  
a bundle support member disposed inside said optical fiber cavity to limit axial movement of said optical fibers with respect to said bundle support member, said bundle support member being string-like,  
wherein at least one end of said bundle support member is securable to a splice box.

15. (rejected) The central tube cable of claim 14, wherein said optical fibers are helically wound around said bundle support member.

16. (rejected) The central tube cable of claim 14, where said optical fibers are S-Z stranded around said bundle support member.

17. (rejected) The central tube cable of claim 14, further comprising a plurality of buffer tubes in which said optical fibers are respectively housed.

18. (rejected) The central tube cable of claim 17, wherein at least some of said buffer tubes contact said bundle support member.

19. (rejected) The central tube cable of claim 18, wherein said buffer tubes are helically stranded around said bundle support member.

20. (rejected) The central tube cable of claim 18, wherein said buffer tubes are S-Z stranded around said bundle support member.

21. (rejected) The central tube cable of claim 14, wherein said optical fibers are held together as an optical fiber ribbon.

22. (rejected) The central tube cable of claim 14, wherein said optical fibers are held together as a plurality of optical fiber ribbons.

23. (rejected) A central tube cable, comprising:  
a cable jacket defining an optical fiber cavity therein;  
at least one radial strength member embedded in said jacket;  
a plurality of optical fibers disposed within said optical fiber cavity; and  
means for securing said central tube cable to a splice box and for preventing axial movement of said optical fibers,

wherein said means is partially disposed inside said optical fiber cavity.

DRAFT APPEAL BRIEF UNDER 37 C.F.R. § 41.37  
U.S. Appln. No.: 10/020,173

Attorney Docket No.: A8268

EVIDENCE APPENDIX

--NONE--



DRAFT APPEAL BRIEF UNDER 37 C.F.R. § 41.37  
U.S. Appln. No.: 10/020,173

Attorney Docket No.: A8268

RELATED PROCEEDINGS APPENDIX

--NONE--